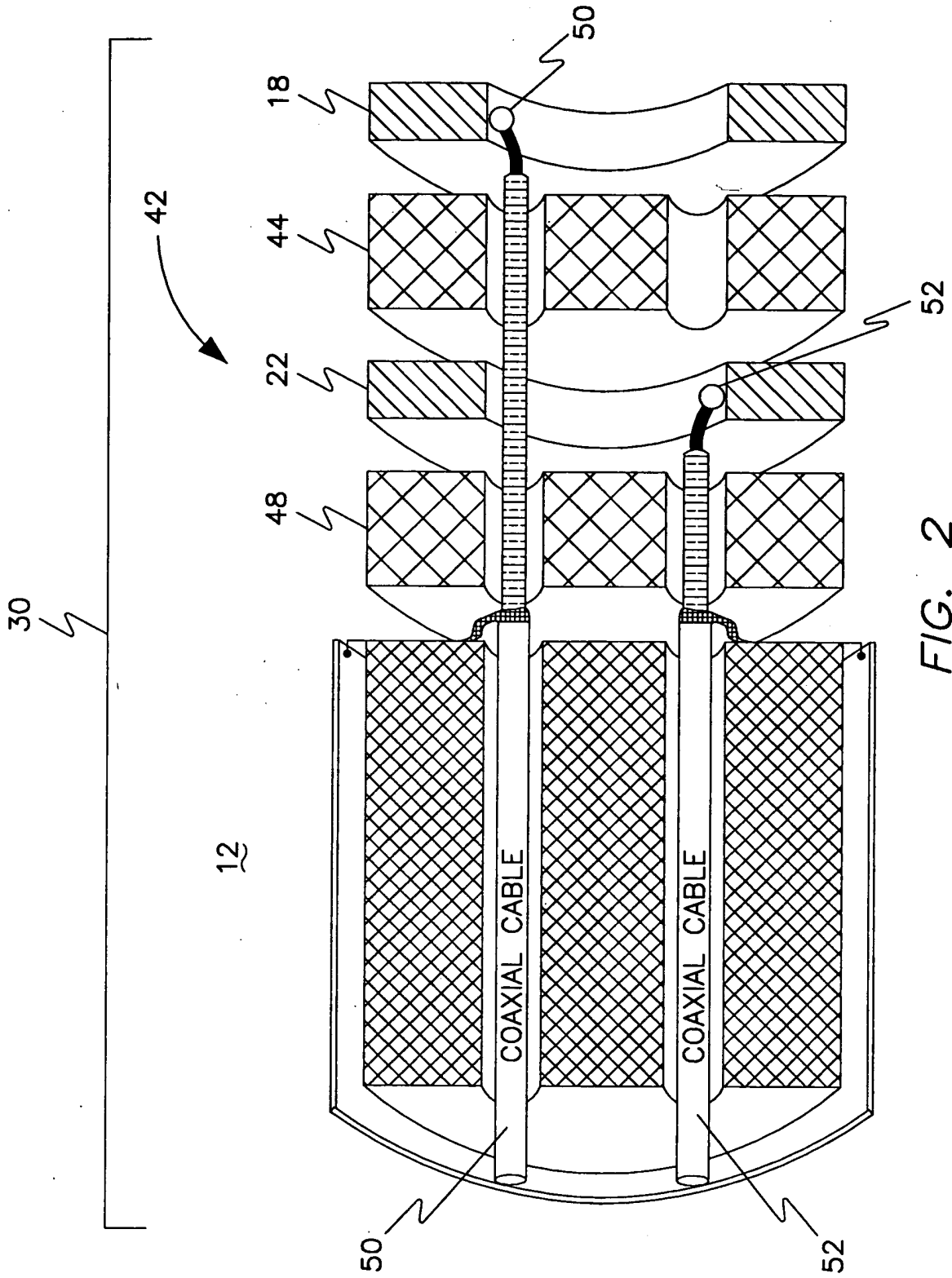


FIG. 1

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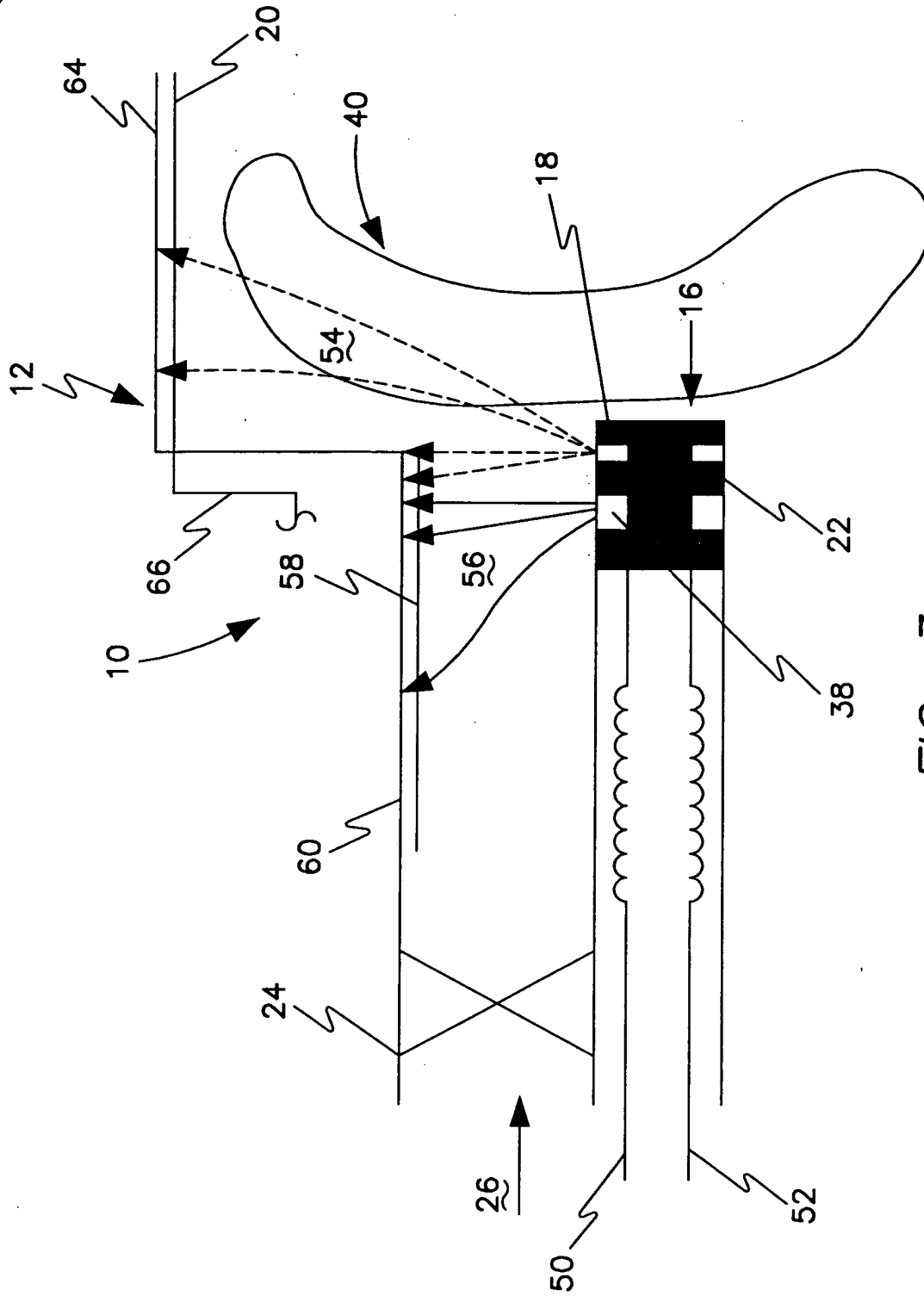


FIG. 3

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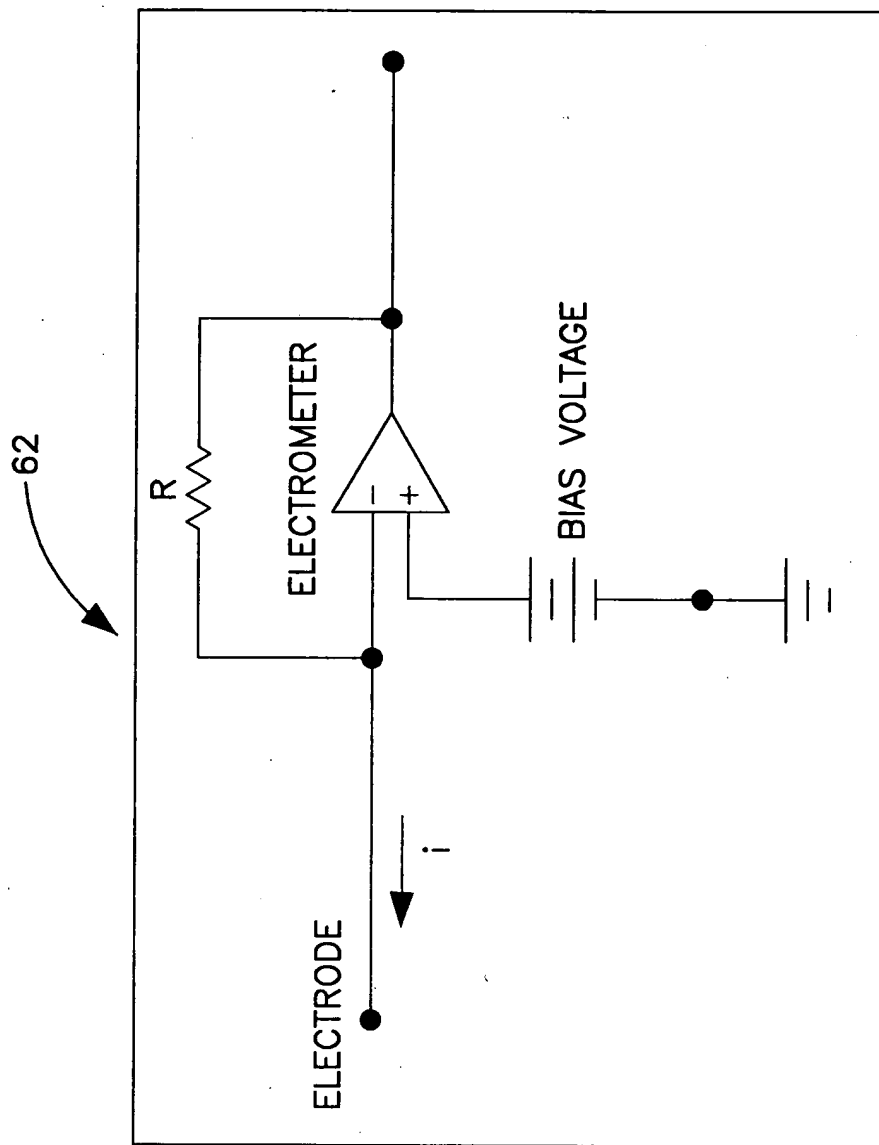
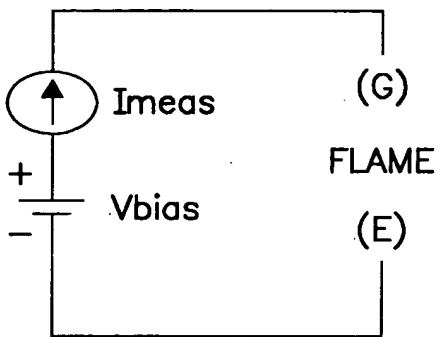


FIG. 4

TYPICAL CONTROL CIRCUIT FOR FLASHBACK DETECTION SENSOR



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*FIG. 4b*

TYPICAL CURRENT MEASURING DEVICE



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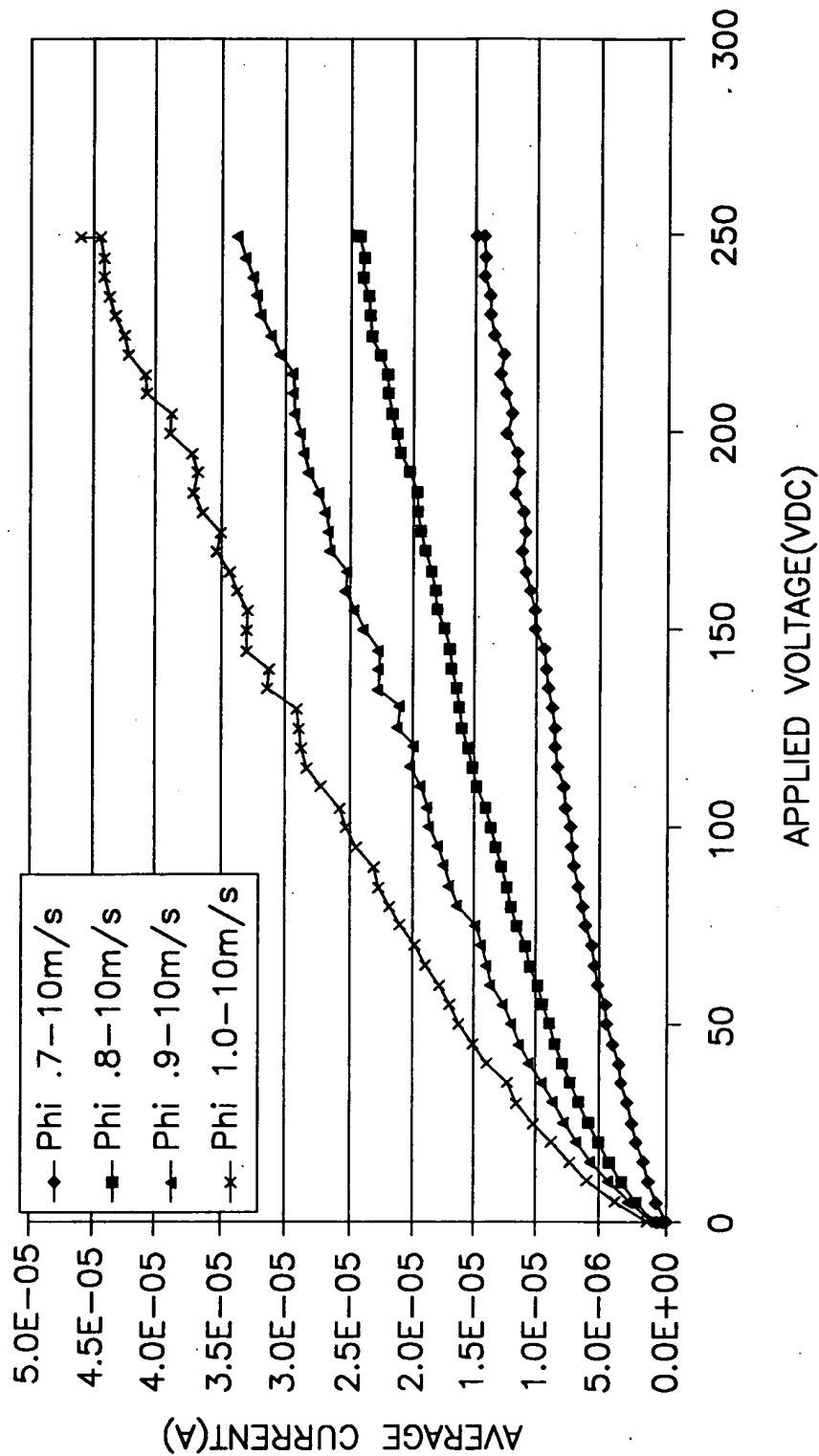


FIG. 5

SHOWS THE AVERAGE CURRENT MEASUREMENTS OVER A RANGE OF APPLIED VOLTAGE ( $V_{bias}$ ) AND EQUIVALENCE RATIOS, AT 10m/s BULK VELOCITY USING THE ISOLATED ELECTRODE COMBUSTION CONFIGURATION.

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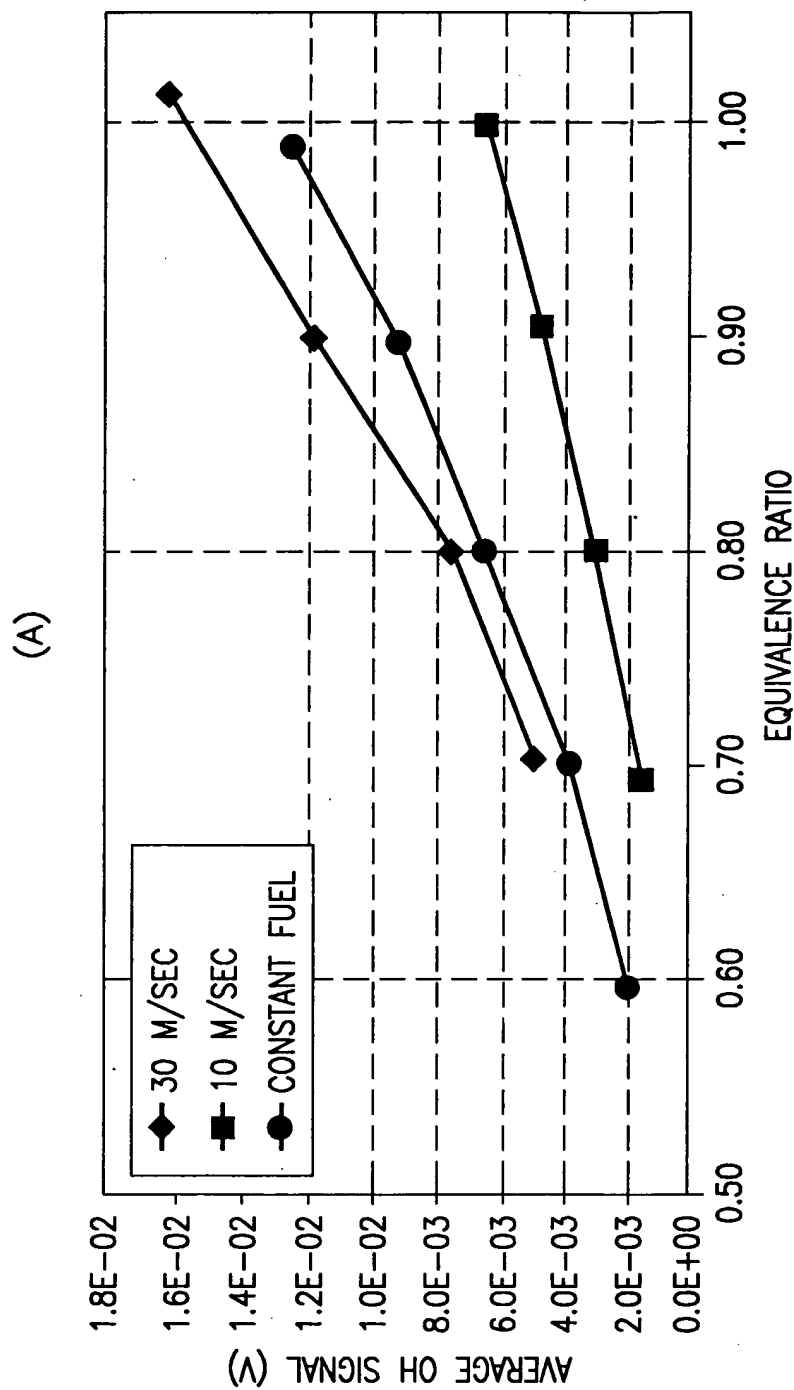


FIG. 6a

DATA FROM THE ISOLATED ELECTRODE CONFIGURATION: (A) THE AVERAGE OH MEASUREMENTS AT A RANGE OF EQUIVALENCE RATIOS

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(B)

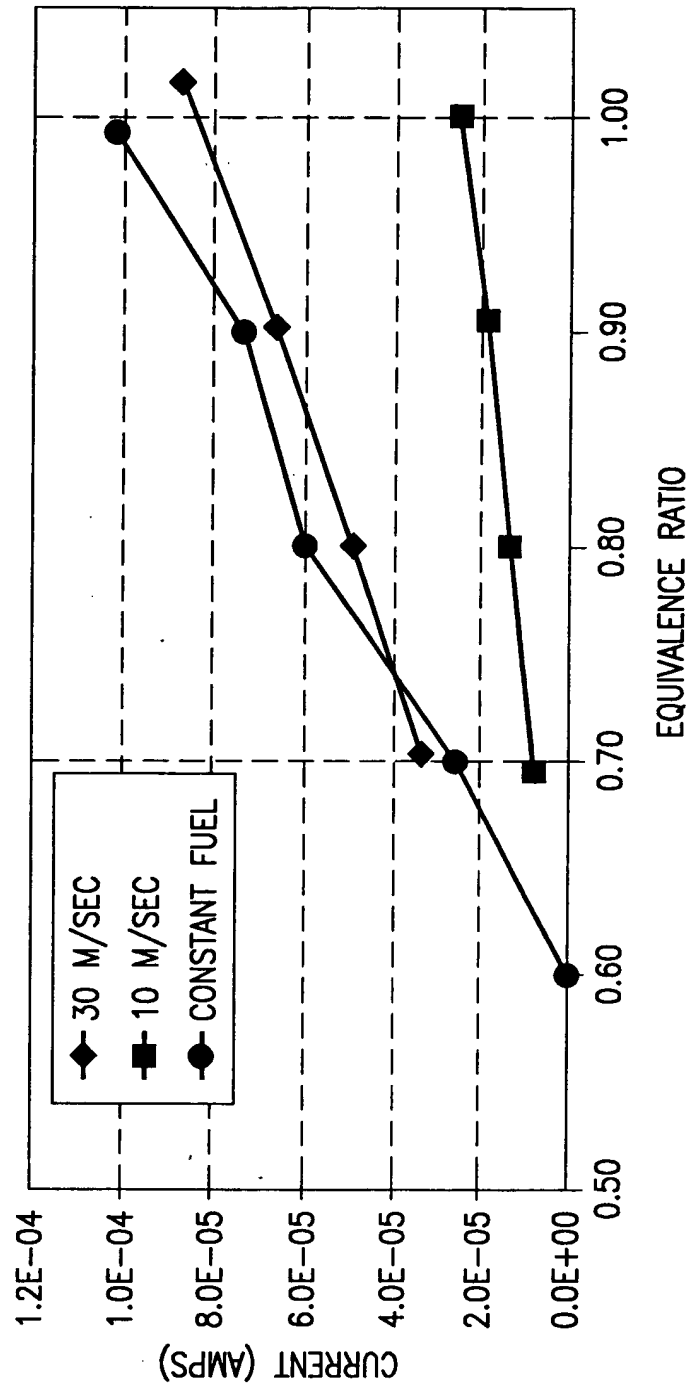


FIG. 6b

DATA FROM THE ISOLATED ELECTRODE CONFIGURATION: (B) THE AVERAGE CURRENT WITH  $V_{bias}$  OF 100 VDC AT A RANGE OF EQUIVALENCE RATIOS



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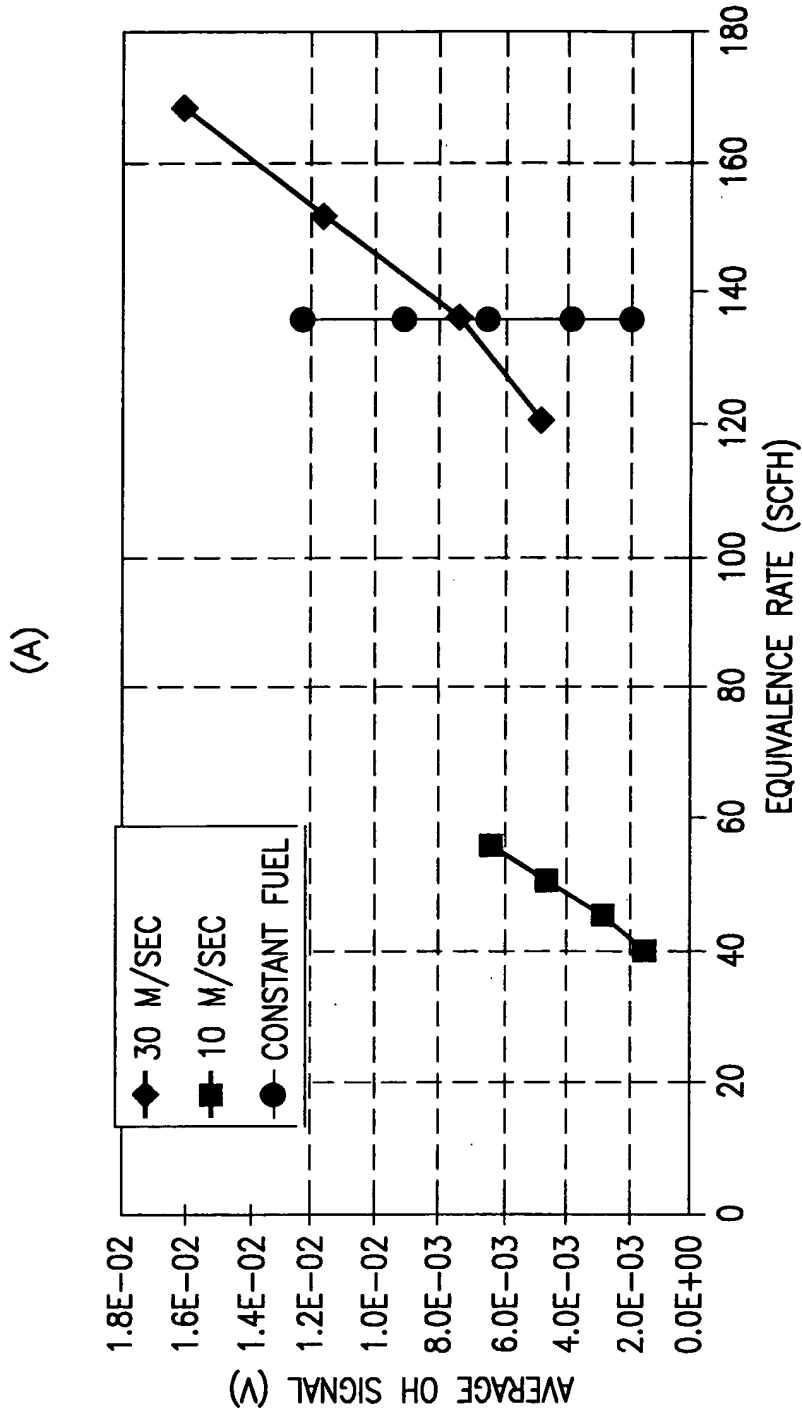


FIG. 7a

DATA FROM THE ISOLATED ELECTRODE CONFIGURATION: (A) THE AVERAGE OH MEASUREMENTS AT A RANGE OF FUEL FLOW RATES



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(B)

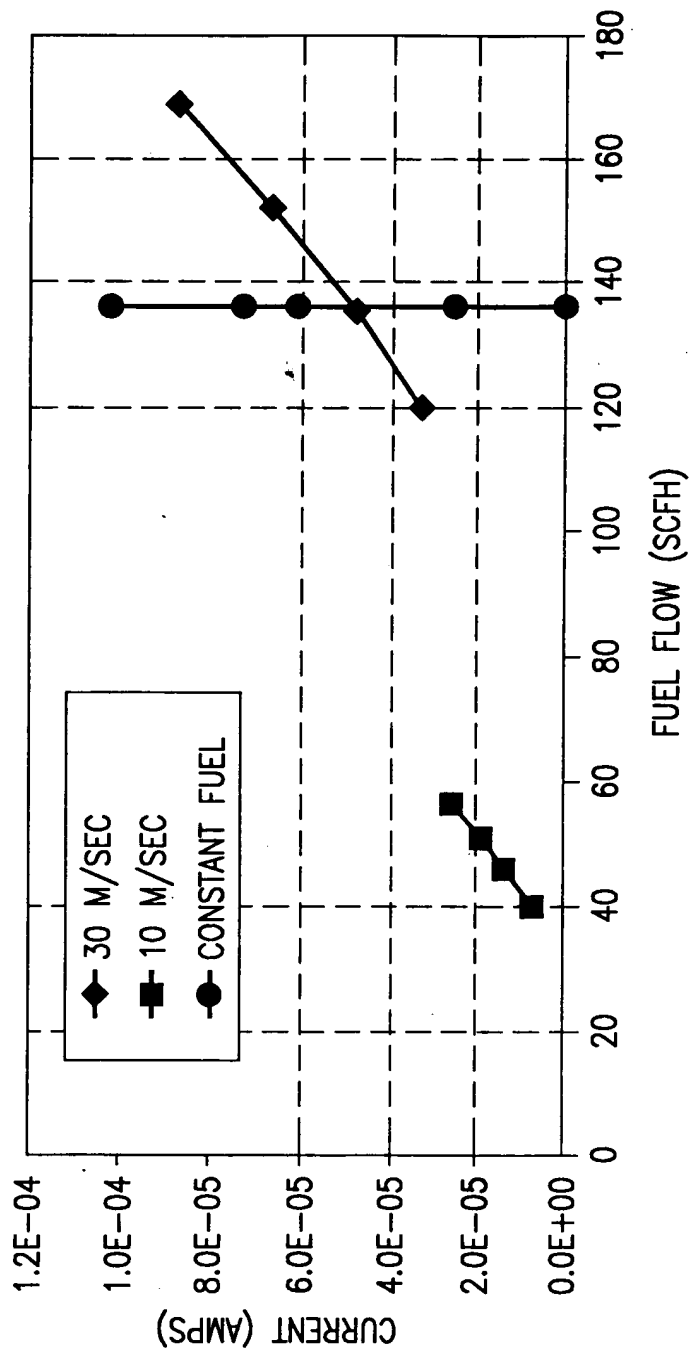


FIG. 7b

DATA FROM THE ISOLATED ELECTRODE CONFIGURATION: (B) THE AVERAGE CURRENT WITH Vbias OF 100 VDC AT A RANGE OF FLOW RATES.



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(A)

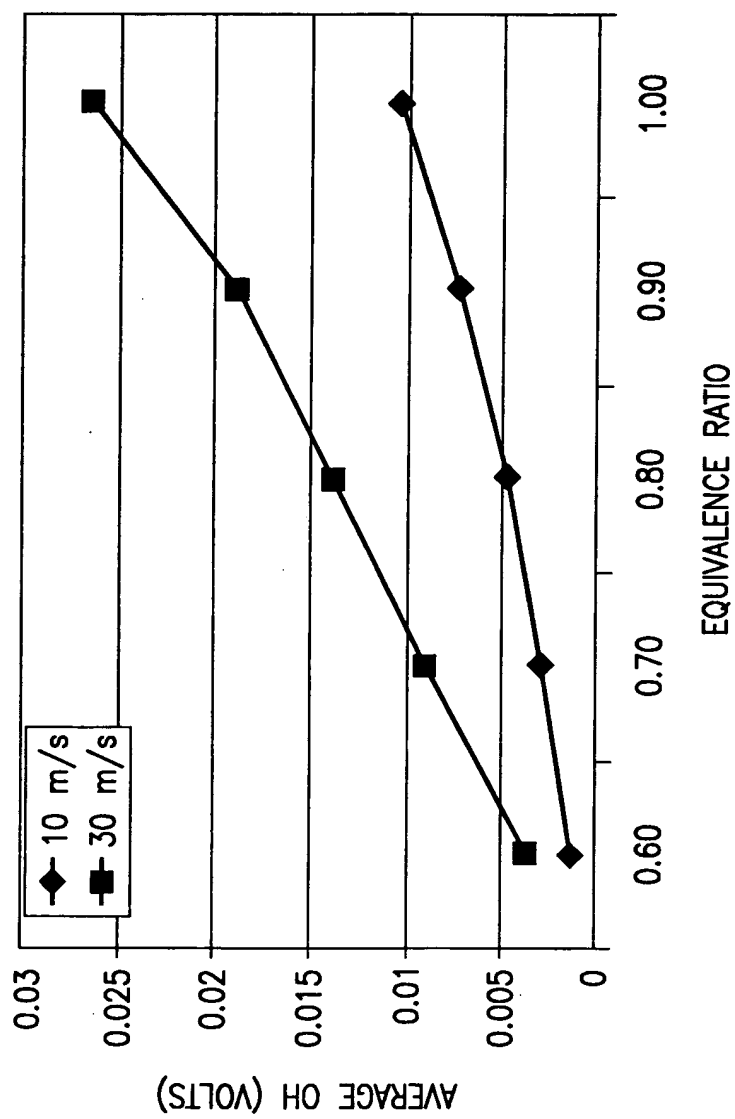


FIG. 8a

DATA FROM THE METAL COMBUSTOR CONFIGURATION: (A) THE AVERAGE OH MEASUREMENTS AT A RANGE OF EQUIVALENCE RATIOS



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(B)

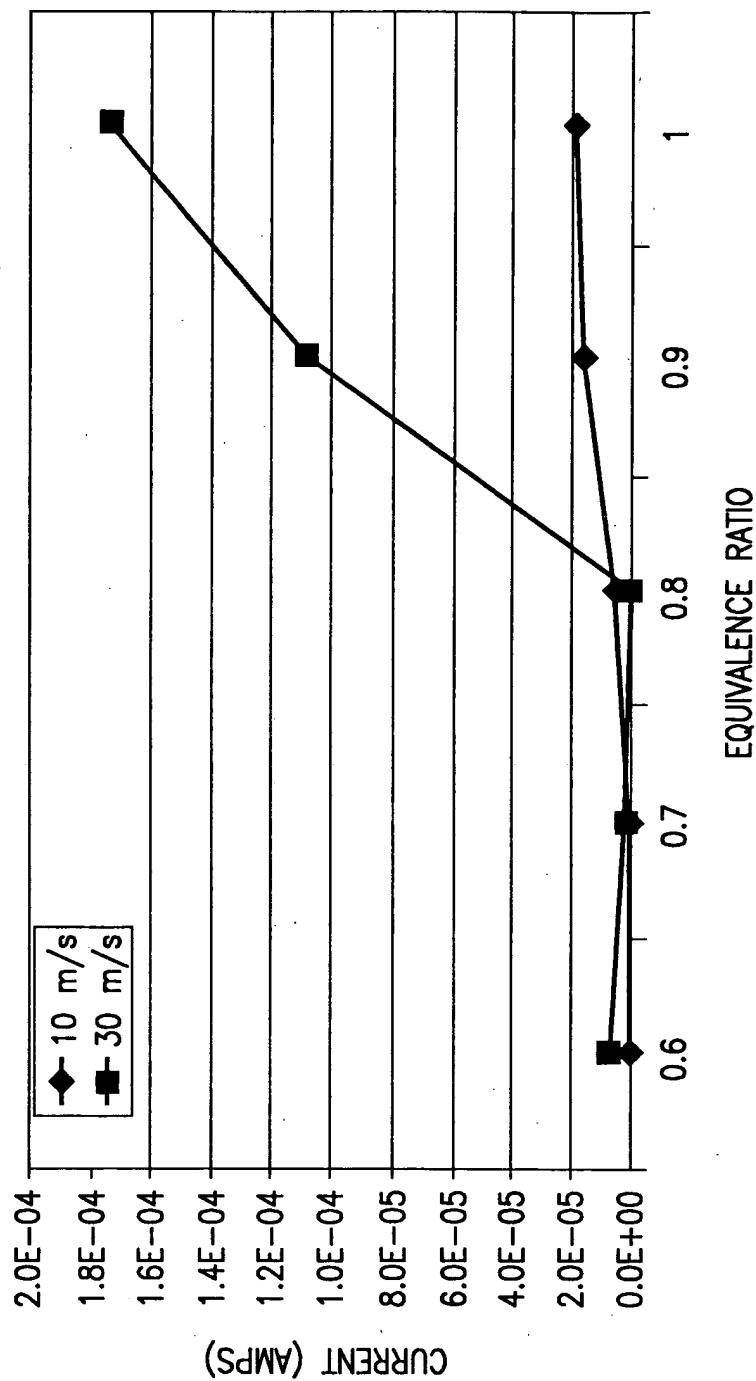


FIG. 8b

DATA FROM THE METAL COMBUSTOR CONFIGURATION: (B) THE AVERAGE CURRENT MEASUREMENTS AT A RANGE OF EQUIVALENCE RATIOS

